

Name: \_\_\_\_\_  
PC : Long Division of Polynomials

Date: \_\_\_\_\_

Divide the first polynomial by the second; express the result in the form:

$$\frac{\text{Dividend}}{\text{Divisor}} = \text{Quotient} + \frac{\text{Remainder}}{\text{Divisor}}$$

1.  $p^3 + p^2 - p - 1; p - 1$
2.  $q^3 - 7q^2 + 10q + 9; q - 4$
3.  $b^2 - 6b + b^3 + 24; b + 4$
4.  $6z^2 - 4 + 4z^3; z + 2$
5.  $16 - m + 4m^3; 2m + 3$
6.  $6c^3 - 9c^2d - 4cd^2 + d^3; 2c + d$
7.  $2a^3 + 3a^2 - a + 2; a + 2$
8.  $3r^3 + 7r^2 - 18r + 8; 3r - 2$
9.  $11y^2 - 1 + 6y^3 + 2y; 2y + 1$
10.  $6w^3 + 11w^2 + 2; 2w + 1$
11.  $n^2 + 4n + n^4 - 3n^3; n^2 - 1$
12.  $4h^3 - 6h^2p + 4hp^2 - 2p^3; h - p$